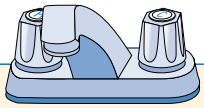
The first step in repairing a faucet leak is to determine the faucet type. There are two basic types of faucets in most homes: compression faucets and washerless faucets.

Compression Faucets

These have separate handles for hot and cold water. A compression faucet uses a threaded stem to compress a washer against the valve seat, and these washers tend to wear and cause the faucet to leak.

Because compression faucets have been manufactured for a long time, hundreds of configurations exist. Yours may not be identical to the illustrations provided here, so be sure to bring the old parts to the store in order to help identify proper replacement parts.

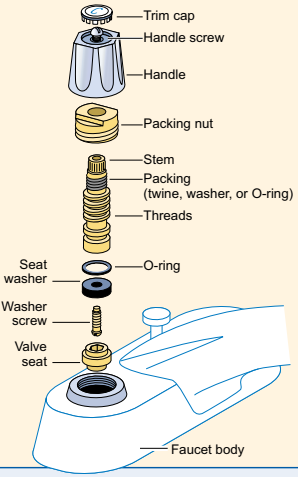


Compression faucet

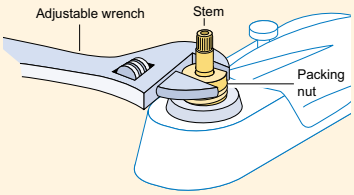
Follow general precautions provided at the beginning of this section. Tools are described on the *Tools* page.

If the faucet is leaking through the spout, you won't be able to tell which faucet valve/handle needs repair. By turning off one shut-off valve at a time you can determine which side has the leak. But chances are the other is about to leak also, so it is good to repair both at the same time.

Compression faucet assembly



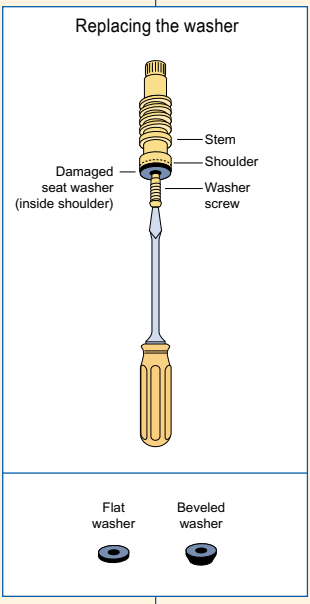
Begin by removing the trim cap, handle screw and handle. A handle puller may be needed. The next part visible is the packing nut, which holds the stem in the faucet body. Remove the packing nut, then unscrew the faucet stem by turning it counterclockwise, and pull it out using an adjustable wrench.

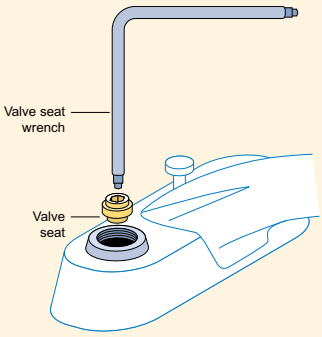


Removing the packing nut

At the end of the stem you'll find a washer held in place by a washer screw. Unscrew the washer screw and replace the washer with the exact size and shape replacement washer. Replace the washer screw with a new brass one if the old one is worn or corroded.

The washer should fit easily inside the stem shoulder/cup-shaped valve seat, and spread out to the edges when screwed down. If the washer is beveled, be sure the beveled edge faces the screw head. If the stem is pitted or badly corroded it is prudent to replace the entire stem assembly. This is the ideal time to inspect and replace a pitted or damaged valve seat. You must have a valve seat wrench for this operation.





Removing the valve seat

Reassemble the faucet, lubricating the stem with plumber's grease. Before tightening the packing nut, make sure the stem is threaded midway into the packing nut so that the new washer is not over-tightened into the valve seat. Turn the water on and test for leaks. If water leaks past the stem through the packing, then the packing needs to be replaced. The packing on top of the stem can be one of three styles: O-ring, packing washer or graphite twine. Remove the packing nut and determine which style you have, and replace it with an exact duplicate. Be sure to lubricate the O-ring or packing twine with plumber's grease before reinstalling.

There are newer washerless compression faucets that have either a diaphragm or a rotating cartridge in each handle to control water flow. Parts for these are difficult to come by and are expensive. Consider replacing the entire faucet.